

of Transportation

Pipeline and

**Hazardous Materials** 

400 Seventh Street, S.W. Washington, D.C. 20590

### COMPETENT AUTHORITY CERTIFICATION FOR A TYPE B(U)

Safety Administration RADIOACTIVE MATERIALS PACKAGE DESIGN CERTIFICATE USA/9056/B(U)-85, REVISION 12

This certifies that the radioactive materials package design described below has been certified by the Competent Authority of the United States as meeting the regulatory requirements for a Type B(U) packaging for radioactive materials as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup>.

- 1. Package Identification Source Production & Equipment Co., Inc., Model No. SPEC 2-T.
- 2. Packaging Description and Authorized Radioactive Contents as described in U. S. Nuclear Regulatory Commission Certificate of Compliance No. 9056, Revision 12 (attached).
- 3. General Conditions
  - a. Each user of this certificate must have in his possession a copy of this certificate and all documents necessary to properly prepare the package for transportation. The user shall prepare the package for shipment in accordance with the documentation and applicable regulations.
  - b. Each user of this certificate, other than the original petitioner, shall register his identity in writing to the Office of Hazardous Materials Technology, (DHM-23), Pipeline and Hazardous Materials Administration, U.S. Department of Transportation, Washington D.C. 20590-0001.
  - c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.

<sup>&</sup>quot;Safety Series No. 6, Regulations for the Safe Transport of Radioactive Material, 1985 Edition (As Amended 1990)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

### CERTIFICATE USA/9056/B(U)-85, REVISION 12

- d. Records of Quality Assurance activities required by Paragraph 209 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
- 4.  $\frac{\text{Marking and Labeling}}{\text{USA/9056/B(U)-85, in}}$  The package shall bear the marking  $\frac{\text{USA/9056/B(U)-85, in}}{\text{Labeling.}}$  and labeling.
- 5. Expiration Date This certificate expires on April 30, 2010.

This certificate is issued in accordance with paragraph 706 of the IAEA Regulations and Section 173.471 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated March 14, 2005 submitted by Source Production & Equipment Co., Inc., St. Rose, LA, and in consideration of other information on file in this Office.

Certified by:

APR 2 1 2005

Robert A. McQuire

Associate Administrator for Hazardous Materials Safety

(DATE)

Revision 12 - Issued to endorse U. S. Nuclear Regulatory Commission Certificate of Compliance No. 9056, Revision 12, and to extend the expiration date.

NRC FORM 618		U.S. NUCLEAR REGULATORY COMMISSION						
(8-2000) CERTIFICATE OF COMPLIANCE 10 CFR 71 FOR RADIOACTIVE MATERIAL PACKAGES								
1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	C. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE		PAGES		
9056	12	71-9056	USA/9056/B(U)	1	OF	3_		

#### 2. PREAMBLE

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.
- 3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION
  - a. ISSUED TO (Name and Address)
     Source Production and Equipment Company, Inc. 113 Teal Street
     St. Rose, LA 70087

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
Source Production and Equipment Company, Inc.
application dated March 24, 2000, as supplemented.

#### 4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable; and the conditions specified below.

# (a) Packaging

- (1) Model No.: SPEC 2-T
- (2) Description

A steel encased, uranium shielded Gamma Ray Projector. Primary components consist of an outer steel shell, internal bracing depleted uranium shield, and a Zircalloy "S" tube. The contents are securely positioned in the Zircalloy "S" tube by a source cable locking device and shipping plug. The unit resembles a rectangular box approximately 13-3/8" long by 4-11/16" high by 4-3/8" wide with a maximum gross weight of 56 pounds.

## (3) Drawings

The packaging is constructed in accordance with Source Production and Equipment Company, Inc. Drawing Nos. 12688-1, Rev. (2); 788-1, Rev. (4); and 788-2, Rev. (0).

The packaging may also be as shown in Source Production and Equipment Company Drawing No. 1000, Rev. (0), provided fabrication was completed prior to June 8, 1989.

The overpack is a 12 gallon open head 20 or 22 gauge National Motor Freight Classification 100-H, or succeeding issues, Item 260 steel drum constructed in accordance with Source Production and Equipment Company, Inc. Drawing No. 53189-2, Rev. (2).

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(8-2000) 10 CFR 71 CFR 71								
FOR RADIOACTIVE MATERIAL PACKAGES								
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## 5.(b) Contents

(1) Type and form of material

Iridium 192 as sealed sources which meet the requirements of special form radioactive material.

(2) Maximum quantity of material per package

225 curies

- 6. The source must be secured in the shielded position of the packaging by the shipping plug, source assembly, and locking device. The shipping plug and source assembly used must be fabricated of materials capable of resisting a 1475°F fire environment for one-half hour and maintaining their positioning function. The source assembly ball stop must engage the locking device. The flexible cable of the source assembly and shipping plug must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.
- 7. The nameplates must be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining their legibility.
- 8. For transportation of more than 45 curies per package in private carriage the shipment must be in accordance with 49 CFR 173 441(b)
- 9. For transportation of more than 45 curies per package by a common carrier, the package must be within a protective overpack as described and constructed in accordance with 5(a)(3).
- 10. In addition to the requirements of Subpart G of 10 CFR Part 71:
  - (a) The package shall be prepared for shipment and operated in accordance with the Operating Procedures of Section 7.0 of the application, as supplemented; and
  - (b) The package must meet the Acceptance Test and Maintenance Program of Section 8.0 of the application, as supplemented.
- 11. The packaging authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.17.
- 12. Expiration date: April 30, 2010.

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(8-2000) 10 GFR 71 CERTIFICATE OF COMPLIANCE							
	FOR RADIOACT	TIVE MATERIAL F	PACKAGES				
1. a. CERTIFICATE NUMBER	5, REVISION NUMBER	C. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE		PAGES	
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# **REFERENCES**

Source Production and Equipment Company, Inc. application dated March 24, 2000.

Supplements dated: March 30, 2000, and March 14, 2005.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Robert J. Lewis, Chief Licensing Section Spent Fuel Project Office Office of Nuclear Material Safety

and Safeguards

Date: 04 April 2005